Drinking Water Health Advisories for PFOS and PFOA
Communications Plan

DATE: Friday, April 29

ACTION: EPA has developed lifetime health advisories (HAs) for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) to assist federal, state, tribal and local officials, and managers of drinking water systems in protecting public health when these chemicals are present in drinking water. EPA's HAs, which are based on the best available peer-reviewed science and are non-regulatory, identify the concentration of PFOA and PFOS in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure. The HAs also provide information on the environmental properties of PFOA and PFOS, measurement methods, and available treatment technologies for removing these contaminants from drinking water.

KEY MESSAGES:

- To assist federal, state, tribal, and local officials and managers of drinking water systems in protecting public health, EPA has used the best available peer-reviewed science to develop lifetime drinking water health advisory values for PFOA and PFOS.
- EPA's health advisories will help public health officials make decisions to protect fetuses and newborns from harmful developmental effects while also protecting children and adults from negative health effects over a lifetime of exposure.
- Concentrations of PFOA and PFOS below EPA's lifetime health advisory levels should not impact people's health.
- If monitoring indicates concentrations above the health advisories, systems are encouraged to consult with their State drinking water safety agency – or with EPA in jurisdictions for which EPA is the primary drinking water safety agency – to develop an approach for gathering data to characterize the level, scope and source of contamination and to inform what next steps may be appropriate.
- In locations where the health advisory levels are exceeded, drinking water systems and public health officials should provide prompt notice directed to pregnant and lactating women and caregivers preparing bottles for infants. Such notice may include steps that can be considered to reduce risk such as seeking an alternative drinking water source, or in the case of parents of bottle-fed infants, using formula that does not require adding water.

BACKGROUND on PFOA/PFOS

PFOA and PFOS are fluorinated organic chemicals that are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFAS). They were used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g., cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields and in a number of industrial processes.

Drinking water can be an additional source of exposure in the small percentage of communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where PFAS were produced or used to manufacture other products or an airfield at which they were used for firefighting.

Because PFOA and PFOS have been used in so many consumer products, most people have been exposed to these chemicals. Scientists at the Centers for Disease Control and Prevention have found PFOA and PFOS in the blood of nearly all the people they tested. These studies have shown, however, that the levels of PFOA and PFOS in blood have been decreasing since companies in the U.S. voluntarily agreed to stop producing these chemicals.

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BACKGROUND ON EPA'S LIFETIME HEALTH ADVISORY:
Health advisories reflect concentrations below which adverse health effects are not expected to occur. They provide states, drinking water utilities and the public with information about the health effects of PFOA and PFOS, and methods to sample and treat for these contaminants in drinking water.

EPA's HA levels, which identify the concentration of PFOA and PFOS in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure, are: **0.07 parts per billion for PFOA and PFOS.** Because these two chemicals cause similar types of adverse health effects, EPA recommends that when both PFOA and PFOS are found in drinking water the **combined** concentrations of PFOA and PFOS be compared with the 0.07 part per billion HA level.

EPA's lifetime HAs are based on peer-reviewed toxicological studies of exposure of animals to PFOA and PFOS, applying scientifically appropriate uncertainty factors. The development of the HAs was also informed by epidemiological studies of human populations that have been exposed to PFAS. The HAs are set at levels that EPA concluded will not result in adverse developmental effects to fetuses during pregnancy or to breast-fed infants, who are the groups most sensitive to the potential harmful effects of PFOA and PFOS. EPA's analysis indicates that exposure to these same levels will not result in adverse health effects to the general population over a lifetime of exposure to these chemicals.

ANTICIPATED REACTION:
There is likely to be considerable interest and response to EPA's publication of the final health advisories for these chemicals. Over the past several months, contamination of drinking water systems in New York and Vermont has drawn extensive media, state government and congressional attention. Stakeholders and the press are aware that EPA has been working to finalize these new final health advisories, which are significantly lower (more stringent) than the 2009 provisional advisories they replace: 0.4 µg/L (or ppb) for PFOA and 0.2 µg/L (or ppb) for PFOS.

Stakeholders response will be mixed.

- Industry groups (3M, Dupont) will likely view this change negatively and may be critical of the underlying science and process.
- Environmental groups (Environmental Working Group) are likely to generally support the EPA's use of the latest science and finalize more stringent (lower) values compared to the 2009 provisional values. Some environmental groups may feel the values should be even lower and may call for EPA to regulate PFOA and PFOS under the Safe Drinking Water Act.
- States and local governments will likely be neutral or supportive of the issuance of new advice, but will have concerns regarding monitoring showing exceedances of the values. They may call upon EPA to regulate PFOA and PFOS in drinking water and/or to take emergency enforcement action and/or provide financial or technical support to communities. Some states that have developed lower (e.g., New Jersey) or higher (e.g., New York) advisory values may have questions or concerns about how their values relate to EPA's lifetime values.
- The Department of Defense has generally applied the 2009 provisional values for PFOA and PFOS in addressing site contamination issues and may be critical of the new lower values.
- Drinking water utilities are likely to be publicly neutral but may express concerns regarding the stringency of the advisories.
- Consumers, both those using public water systems and private wells, will be concerned about potential health risks from these chemicals.

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COMMUNICATIONS MATERIALS:

External:

- Embargoed stories by Washington Post and Wall Street Journal
- EPA Connect Blog by Joel Beauvais
- Fact sheet
- Webpage (tentatively https://www.epa.gov/dwstandardsregulations/pfas-drinking-water) will include:
    - sortable monitoring results table and list of water systems with elevated HA levels
    - Consumer FAQ
    - Health Advisory documents
    - Health Effects Support documents
- Social media (promote Connect) Blog

Internal:

- Communications Plan with Roll out schedule, Notification List, and internal Q&A
- Sample Questions to provide to Regions and Utilities

ROLL-OUT SCHEDULE

Monday 4/18:

- HQ discussion with ECOS, ASTHO and ASDWA leadership regarding potential advice to states and systems.
- HQ circulated draft Fact Sheet to Regions and conducted informational call with Regional Water and Enforcement Division Directors

Wednesday 4/20:

- OLEM/Federal Facilities and OW staff brief DOD
- Senior Policy: Administrator discussion with RAs

Thursday/Friday 4/21-4/22

- OW briefs CDC, HHS, FDA, and CPSC

Friday, 4/22:

- RA call with Joel/OW to discuss HAs and roll-out

Monday, 4/25: Regions initiate discussions with individual states on substance of advice and potential systems of concern (based on UCMR data). Regions should NOT provide documents externally and should emphasize the importance of confidentiality with regard to the advance information being provided. Regions SHOULD discuss the following with states:

a. the expected timing of roll-out of the final HAs (4/29)

b. the substance of the draft Fact Sheet for the Health Advisories, including EPA recommendations to public health officials and drinking water system operators

c. EPA's UCMR data with regard to systems in the relevant state that may have potential concerns based on that data

d. the HA numbers, so that states can evaluate whether there are other (non-UCMR) areas of potential concern

Thursday, 4/28:

- Embargoed interview/information for Washington Post and Wall Street Journal
- Head's up calls are made to the following organizations:

OST:

- Regional WDDs
- Michael Scozzafava, OLEM/ Superfund
- Mary T. Cooke, OLEM/Federal Facilities
- Brenda Foos, OCHP
- Robert Fegley and Robert Cantillo, ORD
- Antonia Calafat, CDC
- Suzanne Fitzpatrick, FDA
- James Stephens and Henry Abadin, ATSDR
- Frank J. Hearl and Christine Whittaker, NIEHS
- Treye Thomas and Michael Babich, CPSC
- Bill Perry and Joe Coble , OSHA
- John Bucher, Chad Blystone, Scott Masten and Michael Devito, NTP/NIH

OGWDW:

- Michael Deane, Director, National Association of Water Companies
- Tracy Mehan, Government Affairs Director, American Water Works Association
- Mike Paque, Executive Director, Groundwater Protection Council
- Jim Taft, Executive Director, Association of State Drinking Water Administrators
- Lynn Thorp, National Campaigns Director, Clean Water Action
- Diane Van de Hei, Executive Director, Association of Metropolitan Water Agencies
- Sam Wade, Executive Director, National Rural Water Association
- Mae Wu, Natural Resources Defense Council

Friday, 4/29:

- Early Morning: Pre-publication of FRN posted to web
- 9:00 a.m.: Remaining notifications (TBD) and OCIR makes head's up calls
- 10:30 a.m.: Website goes live
- 11 a.m.: Blog posted
- 11:30 a.m.: Social media and stakeholder notification via email

QUESTIONS AND ANSWERS

Policy

Is EPA going to establish a national drinking water standard for PFOA and PFOS? [OGWDW]
EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act. The Agency evaluates data gathered from the UCMR to characterize the levels of unregulated contaminants that occur in drinking water and the frequency of that occurrence on a national basis. The Agency will consider the occurrence data from UCMR 3, along

with the peer reviewed health effects assessment supporting the PFOA and PFOS Health Advisory, to make a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

EPA included PFOA and PFOS on the third Contaminant Candidate List (CCL) published by the EPA in 2009 and the draft fourth CCL published in 2015. The CCL is a list of contaminants that are known or anticipated to occur in drinking water that may require regulation. The Agency uses the CCL to identify priority contaminants for regulatory decision making and information collection. The Agency also included PFOA and PFOS among the contaminants water systems are required to monitor for in accordance with the third Unregulated Contaminant Monitoring Rule (UCMR) in 2012.

Why is EPA taking action now?
EPA published provisional short-term Drinking Water Advisories in 2009 to assess potential risk from exposure to PFOA and PFOS through drinking water at a contaminated site. As the database of studies for both chemicals has expanded, EPA has been able to develop and peer review Health Effects Support Documents. EPA utilized these documents to establish and finalize lifetime health advisories for PFOA and PFOS in drinking water.

What's the difference between your provisional 2009 advisories and your final advisories?
The final HAs reflect the latest scientific information and EPA policies, including updated toxicity values and exposure parameters such as drinking water consumption rate. Consideration of this information led EPA to determine that the safe level for PFOA and PFOS in the final HAs should be lower (more stringent) than those in the 2009 provisional advisories.

What's the basis for the findings in the Health Effects Support Documents?
The Health Effects Support Documents (HESD) provide the health effects basis for development of the HAs, including the science-based decisions providing the basis for estimating the point of departure. To develop the HESDs, EPA assembled the most current available information on toxicokinetics, acute, short-term, subchronic and chronic toxicity and cancer in humans and animals.

- Critical Studies
  - Provisional HA: Utilized a single study for each chemical; liver endpoint as critical effect.
  - Lifetime HA: Evaluated dose-response for six studies covering a spectrum of exposures and endpoints (both systemic and developmental); developmental endpoints as critical effect. RfDs based on developmental effects are supported by systemic effects.
- Quantification
  - Provisional HA: First order kinetics; uncertainty factor derived based on differences in species half life.
  - Lifetime HA: Pharmacokinetic model Human Equivalent Dose derived from animal serum measurements.
- Target population
  - Provisional HA: 10 kg one-year old infant consuming 1L/day; 20% RSC
  - Lifetime HA: drinking water intake adjusted by body weight for lactating women [0.054 L/kg]; 20%RSC

Can you tell me more about your separate IRIS effort?
EPA plans to begin a separate effort to determine the PFAS compounds for which an Integrated Risk Information System (IRIS) assessment is needed, as indicated in the 2015 IRIS Multi Year Agenda.

What support is EPA providing to the affected communities?
EPA will be providing technical assistance and support to states and communities as needed.

Is there an EJ/Equity component for the affected communities?
Each community faces unique challenges when addressing concerns related to environmental issues. Therefore, EPA recommends that water systems that have detected PFOA and PFOS at individual or combined concentrations that exceed the HA level should undertake additional monitoring to determine whether steps are appropriate to reduce their consumers' exposure to PFOA and PFOS. Systems are encouraged to consult with their State drinking water safety agency – or with EPA in jurisdictions for which EPA is the primary drinking water safety agency – to develop an approach for gathering data to characterize the level, scope and source of contamination and to inform what next steps may be appropriate.

It seems like the responsibility to test and potentially treat the water with elevated PFOS/PFOA levels falls on individual water system operators and private well owners. Is this enough action to safeguard the health of all Americans?
EPA believes that states, tribes, local and federal governments, systems owners and operators, consumers and other stakeholders, all share in the responsibility in protecting our nation's drinking water. We all must work together to address the broad set of challenges and opportunities we face and take the appropriate actions to ensure that the citizens of our country have safe and clean drinking water.

My state currently has a different value for PFOA/PFOS than EPA's health advisories. Why is this?
Health advisories serve as informal technical guidance to assist federal, state, tribal and local officials, and managers of public or community drinking water systems in protecting public health when spills or contamination situations occur. Differences between EPA's lifetime drinking water health advisory values and state drinking water guidelines for PFOA and PFOS may be due to different regulatory contexts (i.e., state specific guidance) and exposure assumptions, such as drinking water intake and consideration of the contribution of other sources of exposure (i.e., diet).

Does EPA regulate PFOA and PFOS in effluent from industrial sources?
No, EPA does not regulate PFOA or PFOS directly in effluent guidelines from industrial sources.

Does EPA regulate PFOA and PFOS levels in biosolids?
No, EPA does not regulate PFOA or PFOS in sewage sludge/biosolids. Some states may monitor for them if they are on a state-derived priority chemical list.

Does EPA regulate PFOA and PFOS in wastewater from municipal sources? [OWM]
No, EPA does not regulate PFOA or PFOS in wastewater from municipal treatment plants.

I've heard about the past voluntary effort with industry to phase PFOS out of production in the U.S. What's the status with the phaseout? Who's still using PFOS/PFOA?
Between 2000 and 2002, PFOS was voluntarily phased out of production in the U.S. by its primary manufacturer, 3M. Subsequently, EPA issued regulations to limit future manufacturing, including importation, of PFOS and its precursors. A limited set of existing uses (fire resistant aviation hydraulic

fluids, photography and film products, metal finishing and plating baths) was excluded from these regulations because alternatives were not yet available.

In 2006, EPA invited eight major companies to commit to working toward the elimination of PFOA, and chemicals that degrade to PFOA, from emissions and products by the end of 2015. EPA's most recent progress report (January 2015) indicated that the companies were on track to reach the goal of phasing out these chemicals. EPA is now evaluating the companies' final reports submitted at the end of December 2015.

PFOA and PFOA continued to be produced for the following end-uses:
PFOA Firefighting foams, lubricants/surfactants/emulsifiers
PFOS: Metal plating and finishing, firefighting foams, photograph development, aviation fluids.

[Note: OPPT needs to review]

Consumer Concerns

My water has PFOA/PFOS in it at levels above the health advisory. Should I be concerned about my health? [OST]
If you are concerned about potential health effects from exposure to perfluorinated chemicals, contact your doctor or health care professional and explain the basis for your concern.

I live in one of the communities with elevated PFOS/PFOA levels. Who do I call to get more information about what my utility is doing to address the elevated levels?
If customers are concerned about the possibility of PFOA/PFOS in their drinking water, they should have their water tested. Customers that are served by a public water system can also contact their local water supplier and ask for a copy of their Consumer Confidence Report. This report lists the levels of contaminants that have been detected in the water, including those monitored under the UCMR program, and whether the system meets state and EPA drinking water standards. If are concerned about the possibility of PFOA/PFOS in your drinking water and you are served by a private well, EPA recommends testing your drinking water. In addition, EPA recommends that residents can reach out to their local public health department for more information.

The most recent Consumer Confidence Report can be obtained from your drinking water utility, by visiting their website or contacting them for a copy. Some public water systems upload their Consumer Confidence Report to EPA's website at: http://www.epa.gov/ccr. Information about private wells can be found here: http://www.epa.gov/privatewells.

Do systems with high levels of PFOA/PFOS have to take immediate action by treating the water or providing bottled water? [OGWDW]
EPA recommends that water systems that detect PFOA and PFOS at individual or combined concentrations that exceed the HA level during monitoring pursuant to EPA's Unregulated Contaminant Monitoring Rule or other sampling efforts should undertake additional monitoring to determine whether steps are appropriate to reduce their consumers' exposure to PFOA and PFOS. Systems are encouraged to consult with their State drinking water safety agency – or with EPA in jurisdictions for which EPA is the primary drinking water safety agency – to develop an approach for gathering data to

characterize the level, scope and source of contamination and to inform what next steps may be appropriate.

If sampling results demonstrate that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 0.07 parts per billion, drinking water systems and public health officials should provide consumers with information about the levels of PFOA and PFOS in their drinking water.

It is important to keep in mind that, in some cases installing new treatment, adjusting the current source, or obtaining a new source of drinking water can take months or more for design and construction to be completed. Given that exposure to PFOA and PFOS at levels above the HAs over shorter time periods may increase risks of adverse health effects in fetuses during pregnancy or to breast-fed or bottle-fed infants, EPA recommends that drinking water systems and public health officials provide prompt notice directed to pregnant and lactating women and caregivers preparing bottles for infants, when the HA levels are exceeded. Such notice may include steps that can be considered to reduce risk such as seeking an alternative drinking water source, or in the case of parents of bottle-fed infants, using formula that does not require adding water.

Can a person drink tap water containing PFOA or PFOS at the level of the health advisory every day of their life and not expect adverse health effects from these chemicals? [OST]
Yes. The PFAS Health Advisories (HA) describe non-regulatory concentrations of drinking water contaminants at which adverse health effects are not anticipated to occur over a lifetime. The HAs also contain a margin of safety to protect sensitive members of the population.

Are the health advisory levels safe for all children (regardless of age)?
Yes, the health advisory levels are safe for children regardless of age. The health advisory levels are based on developmental effects resulting from exposures that occur during pregnancy and lactation (nursing) and are protective for all other health effects (non-cancer and cancer) that may occur during a lifetime of exposure to these chemicals in drinking water. Additionally, the exposure factors applied in the determination of the health advisory levels are specific to the most sensitive population, and are protective of pregnant women as well as the general population including children. Thus, the protection conferred by the health advisory levels is broadly protective of public health.

Should I be worried about other PFAs in drinking water? [OGWDW]
These HAs are specifically for PFOA and PFOS and do not apply to other PFAs. The Agency is continuing to gather information about other PFAs In addition to monitoring for PFOA and PFOS under UCMR 3 EPA had systems monitor for four other PFASs Results of this monitoring effort can be found on the publicly-available National Contaminant Occurrence Database (NCOD) (). EPA updates the information approximately quarterly. The last update, reflecting results received as of January 1, 2016, was posted in March 2016. EPA expects the complete dataset from UCMR 3 to be available by mid-2016.

What should a pregnant woman who has been drinking water for 8 months do?
If you are concerned about potential health effects from exposure to perfluorinated chemicals, contact your doctor or health care professional and explain the basis for your concern. Because there is evidence that PFOS and PFOA may increase risks of adverse health effects in breast-fed or bottle-fed infants, EPA recommends that if the health advisory levels are exceeded, pregnant and lactating women and caregivers preparing bottles for infants to seek an alternative drinking water source if, or to utilize

formula that does not require adding water while the system is taking action to reduce levels of PFOA and PFOS.

Are the lifetime health advisory values protective of pregnant women, fetuses, and children?
The drinking water health advisories values are established at levels designed to be protective of exposures that occur during pregnancy and lactation (nursing) over a period of exposure lasting weeks to months. The lifetime values and are protective for other health effects (non-cancer and cancer) that may occur during a lifetime of exposure to these chemicals in drinking water.

What are the effects of exposure to PFOA/PFOS?
Peer-reviewed scientific studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breast-fed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

I get my tap water from a private well. How can I find out if PFOA and PFOS are in my water? [OGWDW]
Laboratory analysis is necessary to determine if your water contains perfluorinated chemicals. Qualified testing labs can analyze a sample of your water to determine whether perfluorinated chemicals are present and at what concentrations. In some locations, regulators or industry have set up programs to measure perfluorinated chemicals in groundwater. Your local water or health department or drinking water system should know if there is such a program in your area. If no program has been established in your area, you can pay to have independent testing done at a qualified testing lab (typical cost is several hundred dollars per sample).

If PFOA or PFOS have been detected in my tap water at a level above the health advisory, is it safe to use my water for:

- **cooking?**
  - No; EPA does not recommend using water with PFOA and/or PFOS above 0.07ppb for cooking.
- **brushing teeth?**
  - No; EPA does not recommend using water with PFOA and/or PFOS above 0.07ppb for brushing teeth
- **bathing/showering?**
  - Yes; The volume of water consumed incidentally during routine bathing/showering is typically substantially less than the amount EPA assumed to develop the Health Advisory values. While there is some evidence that these compounds can be absorbed through the skin, EPA has focused the assessment for the Health Advisory on drinking water ingestion. As a precaution, you may consider taking shorter baths/showers and using a bathroom fan or opening bathroom windows to help remove water droplets (aerosols).
- **washing dishes?**
  - Yes; Washing dishes is not likely to result in significant exposure to PFOA and/or PFOS.
- **doing laundry?**
  - Yes; Doing laundry is not likely to result in significant exposure to PFOA and/or PFOS.
- **a humidifier?**

- No; EPA does not recommend using humidifiers and vaporizers with water contaminated with PFOA and/or PFOS above 0.07 ppb

Can PFOA and/or PFOS be boiled out of my water? [OGWDW]
No; PFOA and PFOS cannot be removed by heating or boiling water.

Is there PFOA and PFOS in bottled water? [Refer to FDA- answer below is from OGWDW/OST research]
We are not aware of any data on the occurrence of PFOA and PFOS in bottled water.
- The International Bottled Water Association (IBWA) has not recommended that members test for PFOS and PFOA. We don't know whether there are any industry data.
- FDA's Office of Food Additive Safety indicated that PFOA and PFOS were never used in the manufacture of materials used to package bottled water.

PFOA & PFOS Usage and Occurrence
How many people in the country have drinking water with levels of PFOA and PFOS above the advisory? [OGWDW]
EPA included PFOA and PFOS among the contaminants for which water systems are required to monitor under the third Unregulated Contaminant Monitoring Rule (UCMR 3) in 2012.

Based on results received to-date, 59 of the public water systems that participated in UCMR 3 reported results for one or more samples for which the sum of PFOA and PFOS concentrations was greater than 0.07 ppb. The combined population served by those 59 systems is approximately 5.4 million. This figure does not take into account any PFOA and PFOS monitoring outside the scope of UCMR 3.

Where can I find the UCMR data? How often is it updated?
Results of this monitoring effort can be found on the publicly-available National Contaminant Occurrence Database (NCOD) (https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule#3). EPA updates the information approximately quarterly.

EPA only had about 5,000 large systems monitor for PFOA and PFOS? What about all of the smaller systems?
UCMR 3 monitoring for PFOA and PFOS took place at all "large" PWSs (i.e., those serving greater than 10,000 people) and at a representative sample of 800 smaller PWSs. We encourage small PWS that were not selected to be part of the UCMR 3 monitoring to consult with their state about the appropriateness of conducting independent monitoring. Consideration should be given to water systems whose sources are located in close proximity to facilities that manufacture or use perfluorinated chemicals. PFOA and PFOS have been associated with the following products and activities:
- Non-stick cooking surfaces
- Fire fighting foams
- Toothpaste, shampoos, cosmetics
- Polishes and waxes
- Electronics
- Lubricants/surfactants/emulsifiers
- Pesticides
- Plumbing tape
- Food containers and contact paper

- Textiles and leather
- Paints, varnishes, sealants
- Metal plating and finishing
- Photograph development
- Semiconductors
- Aviation fluids
- Flame repellants
- Packaging papers
- Oil and mining
- Stain repellants on carpets and upholstery
- Cleaning products

How does a utility reduce/remove PFOS/PFOA from water?
A number of options are available to water systems that decide to take action to lower concentrations of PFOA and PFOS in the drinking water supply. In some cases, drinking water systems may be able to reduce concentrations of PFAS by closing contaminated wells or changing the blend of water sources they use to produced drinking water. Alternatively, public water systems can consider treating source water with activated carbon or high pressure membrane systems (e.g., reverse osmosis) to remove PFOA and PFOS from drinking water. These treatment systems are used by some public water systems today, but should be carefully designed and maintained to assure that they are effective for treating PFAS.

Home drinking water treatment units are typically certified by independent third party organizations against ANSI standards to verify their contaminant removal claims. While some home filters use activated carbon and reverse osmosis to remove impurities – the same technologies utilized by public water supply systems to remove PFOA and PFOS - there are no ANSI protocols for testing home treatment systems to verify that these devices effectively remove PFOA and PFOS or how frequently the filters should be changed in order to maintain removal efficiency.

Superfund/Federal Facilities

If a Superfund site contains PFOA or PFOS, will these new drinking water health advisory levels affect cleanup levels at the site? [OLEM? Awaiting confirmation from Diana Young/Kara Belle]
The new drinking water health advisories will be used to develop the recommended Preliminary Remedial Goals (PRGs) at Superfund sites. PRGs are used to determine if additional investigation and potential action is needed to reduce or eliminate human health risk. PRGs can also be used to inform the need to take *early actions* under the Superfund program to eliminate unacceptable exposures. If the Agency determines that a long-term cleanup action is warranted, the Health Advisory information will be considered in developing appropriate remedial goals based on site specific information. Superfund risk assessments generally consider all potential exposure pathways, including drinking water and soil ingestion, to develop risk-based cleanup levels that are protective of human health.

How will this lifetime value affect federal facilities which use or are contaminated with PFOA or PFOS? [OLEM? Awaiting confirmation from Diana Young/Kara Belle]
Cleanups at Federal Facilities carried out under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) follow the same regulations and guidance as Superfund cleanups that are conducted at private-party sites.

Other:

Why didn't EPA warn the public sooner by using the available science? [OW]

To protect the integrity of the ongoing science review process for updating the PFOA and PFOS health advisories, and to avoid widespread confusion given that the updated national health advisory values were not yet final and were subject to change, EPA worked with our state and federal partners in the early months of 2016 to address individual contaminated site situations using the best available information at the time. We acknowledged that we were working on updating the health advisories and that final lifetime health advisory values may be lower than the provisional health advisories we issued in 2009, but were still under agency and interagency review.